

In the Claims

1-46 (canceled).

47 (currently amended). An isolated and purified nucleic acid sequence encoding a signal peptide comprising amino acids -17 to -1 of SEQ ID NO: 3903 fused in frame to the 5' end of a nucleic acid sequence encoding a polypeptide that is heterologous to a polypeptide comprising amino acids 1 to 103 of SEQ ID NO: 3903 or an isolated and purified nucleic acid sequence comprising nucleotides 53 to 511 of SEQ ID NO: 43.

48 (currently amended). The nucleic acid sequence of claim 47 comprising nucleotides 53 to 103 of SEQ ID NO: 43 fused in frame to the 5' end of a nucleic acid sequence encoding a polypeptide that is heterologous to a polypeptide comprising amino acids 1 to 103 of SEQ ID NO: 3903.

49 (currently amended). The nucleic acid sequence of claim 47, ~~wherein said polypeptide is encoded by~~ comprising nucleotides 53 to 511 of SEQ ID NO: 43.

50-52 (canceled).

53 (currently amended). An expression vector comprising a promoter operably linked to:

- (a) a nucleic acid sequence encoding a signal peptide comprising amino acids -17 to -1 of SEQ ID NO: 3903 fused in frame to the 5' end of a nucleic acid sequence encoding a polypeptide that is heterologous to a polypeptide comprising amino acids 1 to 103 of SEQ ID NO: 3903;
- ~~(b) a nucleic acid sequence comprising nucleotides 53 to 103 of SEQ ID NO: 43;~~
- (e)(b) a nucleic acid sequence comprising nucleotides 53 to 511 of SEQ ID NO: 43;

- ~~(d)~~(c) a nucleic acid sequence comprising nucleotides 53 to 103 of SEQ ID NO: 43 fused in frame to the 5' end of a nucleic acid sequence encoding a polypeptide that is heterologous to a polypeptide comprising amino acids 1 to 103 of SEQ ID NO: 3903;
or
~~(e)~~(d) a nucleic acid sequence comprising nucleotides 53 to 511 of SEQ ID NO: 43 fused in frame to the 5' end of a nucleic acid sequence encoding a polypeptide that is heterologous to a polypeptide comprising amino acids 1 to 103 of SEQ ID NO: 3903.

54 (currently amended). The expression vector of claim 53, wherein said nucleic acid sequence encodes a signal peptide comprising amino acids -17 to -1 of SEQ ID NO: 3903 fused in frame to the 5' end of a nucleic acid sequence encoding a polypeptide that is heterologous to a polypeptide comprising amino acids 1 to 103 of SEQ ID NO: 3903.

55 (canceled).

56 (previously presented). The expression vector of claim 53, wherein said nucleic acid sequence comprises nucleotides 53 to 511 of SEQ ID NO: 43.

57 (previously presented). The expression vector of claim 53, wherein said nucleic acid sequence comprises comprising nucleotides 53 to 103 of SEQ ID NO: 43 fused in frame to the 5' end of a nucleic acid sequence encoding a polypeptide that is heterologous to a polypeptide comprising amino acids 1 to 103 of SEQ ID NO: 3903.

58 (previously presented). The expression vector of claim 53, wherein said nucleic acid sequence comprises nucleotides 53 to 511 of SEQ ID NO: 43 fused in frame to the 5' end of a nucleic acid sequence encoding a polypeptide that is heterologous to a polypeptide comprising amino acids 1 to 103 of SEQ ID NO: 3903.

59 (previously presented). The expression vector of claim 53, wherein said vector is a secretion vector.

60-73 (canceled).

74 (new). A host cell comprising an expression vector comprising a promoter operably linked to:

- (a) a nucleic acid sequence encoding a signal peptide comprising amino acids -17 to -1 of SEQ ID NO: 3903 fused in frame to the 5' end of a nucleic acid sequence encoding a polypeptide that is heterologous to a polypeptide comprising amino acids 1 to 103 of SEQ ID NO: 3903;
 - (b) a nucleic acid sequence comprising nucleotides 53 to 511 of SEQ ID NO: 43;
 - (c) a nucleic acid sequence comprising nucleotides 53 to 103 of SEQ ID NO: 43 fused in frame to the 5' end of a nucleic acid sequence encoding a polypeptide that is heterologous to a polypeptide comprising amino acids 1 to 103 of SEQ ID NO: 3903;
- or
- (d) a nucleic acid sequence comprising nucleotides 53 to 511 of SEQ ID NO: 43 fused in frame to the 5' end of a nucleic acid sequence encoding a polypeptide that is heterologous to a polypeptide comprising amino acids 1 to 103 of SEQ ID NO: 3903.

75 (new). The host cell of claim 74, wherein said expression vector comprises a promoter operably linked to a nucleic acid sequence encoding a signal peptide comprising amino acids -17 to -1 of SEQ ID NO: 3903 fused in frame to the 5' end of a nucleic acid sequence encoding a polypeptide that is heterologous to a polypeptide comprising amino acids 1 to 103 of SEQ ID NO: 3903;

76 (new). The host cell of claim 74, wherein said expression vector comprises a promoter operably linked to a nucleic acid sequence comprising nucleotides 53 to 511 of SEQ ID NO: 43.

77 (new). The host cell of claim 74, wherein said expression vector comprises a promoter operably linked to a nucleic acid sequence comprising nucleotides 53 to 103 of SEQ ID NO: 43 fused in frame to the 5' end of a nucleic acid sequence encoding a polypeptide that is heterologous to a polypeptide comprising amino acids 1 to 103 of SEQ ID NO: 3903.

78 (new). The host cell of claim 74, wherein said expression vector comprises a promoter operably linked to a nucleic acid sequence comprising nucleotides 53 to 511 of SEQ ID NO: 43 fused in frame to the 5' end of a nucleic acid sequence encoding a polypeptide that is heterologous to a polypeptide comprising amino acids 1 to 103 of SEQ ID NO: 3903.

79 (new). A method of making a secreted protein comprising the step of introducing a vector comprising a promoter operably linked to:

- (a) a nucleic acid sequence encoding a signal peptide comprising amino acids -17 to -1 of SEQ ID NO: 3903 fused in frame to the 5' end of a nucleic acid sequence encoding a polypeptide that is heterologous to a polypeptide comprising amino acids 1 to 103 of SEQ ID NO: 3903;
 - (b) a nucleic acid sequence comprising nucleotides 53 to 511 of SEQ ID NO: 43;
 - (c) a nucleic acid sequence comprising nucleotides 53 to 103 of SEQ ID NO: 43 fused in frame to the 5' end of a nucleic acid sequence encoding a polypeptide that is heterologous to a polypeptide comprising amino acids 1 to 103 of SEQ ID NO: 3903;
- or
- (d) a nucleic acid sequence comprising nucleotides 53 to 511 of SEQ ID NO: 43 fused in frame to the 5' end of a nucleic acid sequence encoding a polypeptide that is heterologous to a polypeptide comprising amino acids 1 to 103 of SEQ ID NO: 3903.

into a host cell and culturing said host cell to produce a secreted protein.

80 (new). The method of claim 79, wherein said host cell is a mammalian, yeast, insect or bacterial host cell.

81 (new). The method of claim 79, further comprising the step of isolating the secreted protein.

82 (new). The method of claim 79, further comprising the step of purifying the secreted protein.

83 (new). The method of claim 81, further comprising the step of purifying the secreted protein.

84 (new). The method of claim 80, further comprising the step of isolating the secreted protein.

85 (new). The method of claim 80, further comprising the step of purifying the secreted protein.

86 (new). The method of claim 84, further comprising the step of purifying the secreted protein.

87 (new). The method of claim 79, wherein said expression vector comprises a promoter operably linked to a nucleic acid sequence encoding a signal peptide comprising amino acids -17 to -1 of SEQ ID NO: 3903 fused in frame to the 5' end of a nucleic acid sequence encoding a polypeptide that is heterologous to a polypeptide comprising amino acids 1 to 103 of SEQ ID NO: 3903.

88 (new). The method of claim 79, wherein said expression vector comprises a promoter operably linked to a nucleic acid sequence comprising nucleotides 53 to 511 of SEQ ID NO: 43.

89 (new). The method of claim 79, wherein said expression vector comprises a promoter operably linked to a nucleic acid sequence comprising nucleotides 53 to 103 of SEQ ID NO: 43 fused in frame to the 5' end of a nucleic acid sequence encoding a polypeptide that is heterologous to a polypeptide comprising amino acids 1 to 103 of SEQ ID NO: 3903.

90 (new) The method of claim 79, wherein said expression vector comprises a promoter operably linked to a nucleic acid sequence comprising nucleotides 53 to 511 of SEQ ID NO: 43 fused in frame to the 5' end of a nucleic acid sequence encoding a polypeptide that is heterologous to a polypeptide comprising amino acids 1 to 103 of SEQ ID NO: 3903.